

REMARKS

Claims 1-11 remain in the application. Only Claim 1 is in independent form. Claim 12 has been cancelled as being drawn to a non-elected invention.

Claim Rejections Under 35 U.S.C. §112

Claim 4 is rejected to under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Particularly, the term "said head portion" in Lines 4-5 of Claim 4 is found without antecedent basis. The Applicant has corrected this inadvertent typographical error by amending the limitation to read "said head end portion" for which antecedent basis can be found in base Claim 1 (Line 5). It is respectfully submitted that the rejection of Claim 4 under 35 U.S.C. §112 (second paragraph), is overcome.

Claim Rejections Under 35 U.S.C. §103

Claims 1-6 and 9-11 are rejected under 35 U.S.C. §103(a) as being unpatentable over United States 5,772,337 (Maughan et al., in view of United States Patent 2,635,906 (Graham et al.)).

Maughan discloses a movable joint comprising a metal housing having a side wall which defines a central bore with a closed end and an open end. A non-metal lower bearing 22 is disposed within the central bore. An annular non-metal upper bearing 22 is disposed about the movable member within the central bore. The paragraph beginning in Column 4, Line 54, and continuing to Column 5, Line 15, sets forth numerous alternative materials from which the lower 22 and upper 24 bearings may be formed. None of the suggested materials comprise metal.

A careful look at the annular non-metal upper bearing 24 of Maughan clearly indicates that it does not include a "split segment" linking the inner surface with the outer surface. The Office Action suggests that feature 56 (Figure 2) comprises a split segment as defined in Claim 1 of the subject application. However, this cannot be supported from the patent document. Rather, feature 56 is merely a shallow groove formed on the inner surface only to aid in lubrication. (See Column 3, Lines 16-20.) The lubrication grooves 56 do not link the inner surface with the outer surface. They are only formed on the inner surface.

Accordingly, Maughan fails to disclose three claimed features in Claim 1 of the subject application. The three non-disclosed features are: a metal lower bearing, a metal upper bearing, and a split segment linking the inner and outer surfaces of the upper bearing.

The obviousness rejection seeks to combine Maughan with Graham, which discloses a compression-style ball joint assembly having only one keeper-style "upper" bearing 13 holding the ball portion 12a of the stud in the housing 11. The upper bearing 13 is not split, and does not simultaneously engage the ball portion 12a of the ball stud 12 and the inner side wall 11e of the housing 11. Thus, like Maughan, Graham also fails to disclose several claimed features recited in Claim 1 of the subject application. Most notably, neither reference discloses a metal upper bearing having a split segment as defined in Claim 1.

It is well settled that a *prima facie* case of obviousness requires 3 basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the referenced teachings. Second, there must be reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all the claimed limitations.

It is respectfully submitted that none of these 3 basic criteria have been met with regard to Claim 1 in this application. With regard to the first criteria, there is no suggestion or motivation in either Maughan or Graham to combine their respective teachings. These are vastly different styles of ball joints, and neither reference lends itself to the particular features found in the other embodiment. Thus, unless the Examiner can cite a specific passage as evidence of a motivation or suggestion to combine the teachings, the *prima facie* case of obviousness must be deemed to be unsatisfied.

The second criteria needed to establish a *prima facie* case of obviousness requires a reasonable expectation of success. Neither Maughan nor Graham provide any identifiable basis upon which to expect success by modifying their respective teachings to include metal lower and annular metal upper bearings, with the annular metal upper bearing having a split segment linking its inner and outer surfaces. It is only through the Applicant's own teaching that an expectation of success can be found.

Finally, the third basic criteria for a *prima facie* case of obviousness requires that the prior art references when combined must teach or suggest all the claimed limitations. Neither Maughan nor Graham disclose an annular metal upper bearing including a split segment linking its inner and outer surfaces, with its inner surface engaging the head portion of the movable member, and its outer surface engaging the side wall. Because these claimed limitations are not found in either of the references which have been used to support obviousness, the rejection must fail.

Accordingly, it is respectfully submitted that a *prima facie* case of obviousness has not been established with regard to Claims 1-6 and 9-11. Thus, it is respectfully submitted that Claims 1-6 and 9-11 are presented in condition for allowance.

Claims 7-8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Maughan and Graham as applied to Claims 1-6 and 9-11 above, and further in view of United States Patent 5,997,208 (Urbach et al.).

Claims 7-8 depend directly from base Claim 1, which is believed to be presented in condition for allowance. Notwithstanding, the Applicant addresses the rejections against Claims 7-8 below.

Urbach discloses a ball joint assembly 10 utilizing a one-piece bearing cup 24 made from an injection molded polymeric material such as DELRIN™. Like Graham and Maughan before, Urbach also fails to disclose numerous key features recited in independent Claim 1, which key features form the base claim for dependent Claims 7-8. In particular, Urbach fails to disclose a movable joint including a metal lower bearing and an annular metal upper bearing, with the annular metal upper bearing including a split segment linking its inner and outer surfaces.

Accordingly, none of the three prior art references relied upon to establish obviousness of Claims 7-8 are found to include (among others) the essential feature of an annular metal upper bearing including a split segment. Because a *prima facie* case of obviousness requires that all of the claimed elements be taught or suggested in the prior art references when combined, the rejection of obviousness must fail.

Accordingly, it is respectfully submitted that dependent Claims 7-8 are not obvious over Maughan and Graham in view of Urbach.

Closing Remarks

For the foregoing reasons, it is respectfully submitted that a *prima facie* case of obviousness has not been established with regard to the only independent claim, namely Claim 1. Accordingly, it is respectfully submitted that all claims remaining in the application are now presented in condition for allowance, which allowance is respectfully solicited.

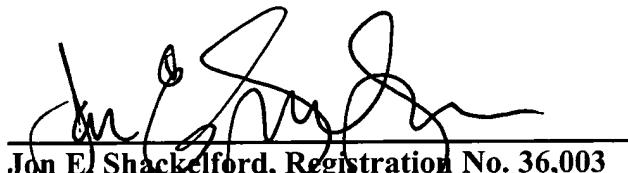
Reconsideration of this application as amended is respectfully requested.

It is believed that this application is now in condition for allowance. Further and favorable action is requested.

The Patent Office is authorized to charge or refund any fee deficiency or excess to Deposit Account No. 04-1061.

Respectfully submitted,

DICKINSON WRIGHT PLLC



Jon E. Shackelford, Registration No. 36,003
38525 Woodward Avenue, Suite 2000
Bloomfield Hills, MI 48304-2970
734-623-1734

5-2-2006
Date

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

Mail Stop: AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Date Mailed: 05-02-06

By: Kelly R. McKinnon
Kelly R. McKinnon